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### DR. HOMAN'S CASES OF GUN-SHOT FRACTURES OF THE THIGH AND WOUNDS OF THE CHEST.

[Concluded from page 16.]

**CASE XXI.**—Lieut. L. G. Draper, Co. I, 75th N. Y. Wounded Oct. 19th. Minié ball entered posterior inner surface of the left thigh, at the junction of the middle and lower thirds, fractured the femur, and is retained. No apparatus has been applied, and the limb is much swollen. Discharge free and offensive; has had irritative fever and diarrhoea; his condition is now (Nov. 7th) improving. On the 11th of November the apparatus shown in Fig. 1 (see last week's issue, p. 11) was adjusted. No union as yet. Remains in Winchester, Jan. 3d. Unfit to be moved.

**CASE XXII.**—Corporal David B. Barnard, Co. C, 30th Mass. Wounded Oct. 19th. Minié ball entered the anterior surface of the thigh, at the junction of the upper and middle thirds, and passed out at a point horizontally opposite on the posterior surface, fracturing the femur, and causing considerable comminution. The discharge has been very copious, but not very offensive. A Smith's anterior splint is at present (Nov. 7th) applied. General appearance fair; expresses himself as feeling quite comfortable. Remains in Winchester, Jan. 3d, 1865.

**CASE XXIII.**—Private S. P. Brown, Co. I, 6th N. Y. Heavy Artillery. Wounded Oct. 19th. A Minié ball entered the outer side of the thigh, at the junction of the middle and upper thirds, and emerged anteriorly towards the inner side, fracturing the femur. The limb was placed on a double inclined plane, and the discharge has been free and is at present (Nov. 8th) laudable. There is no union; the shortening is two inches. General appearance, &c., good. Died Dec. 3d, 1864.

**CASE XXIV.**—Corp. Wm. Franks, Co. C, 24th Iowa, et. 27 years. Wounded Oct. 19th. Was a very large, strong man, in good health. A Minié ball entered right nates, externally to the

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tuberosity of the ischium, and passed forwards and inwards. Its locality could not be ascertained. No splint was applied; there was very little swelling, but much pain was experienced—referred to the hip-joint. The right limb lay across the other when in bed, and was put there voluntarily, as if the femur were uninjured. He occasionally crawled about on his hands and knees, and several times stoop up, apparently bearing some weight on his right leg. On the 3d of November he died, having gradually failed from the time of the injury; there was no eversion and no shortening noticed. At an autopsy, the acetabulum was found to be fractured, and the head and neck of the femur also. The bullet was found, considerably distorted, lying between the sheath of the femoral vessels and the bone. The neighboring portions of the pelvis and the upper third of the femur were denuded of periosteum, and fetid pus had gravitated downwards among the muscular tissues in the neighborhood of the joint.

CASE XXV.—Private Rial Thompson, Co. H, 114th N. Y., æt. 26 years. Wounded Oct. 19th. A Minié ball entered on inner posterior surface of left thigh, near popliteal space, and remained in limb. There is some shortening; the femur is, in my opinion, fractured into the joint, and should have been amputated. He died Nov. 20th, 1864, and the femur was found to be fractured into the knee-joint between the condyles.

CASE XXVI.—Private Robert E. Gitman, Co. F, 114th N. Y. Wounded Oct. 19th. A Minié ball entered the symphysis pubis, passed horizontally through the ramus of the bone, and emerged from the posterior external portion of the thigh, four inches below the trochanter, fracturing the femur in the neighborhood of the neck of the bone. He was stripped and robbed by the enemy, and lay upon the field fourteen hours. He lost much blood by hæmorrhage from the pubic wound, and died on the 30th of October, having had many attacks of secondary hæmorrhage.

We have here briefly recorded twenty-six cases of gun-shot fracture of the thigh; these notes were made during the first week of November, and the records of the hospital were examined on the 3d of January, 1865, to ascertain the condition of the patients at that date. There are recorded in the 19th Corps Hospital, at Winchester, 28 cases of fracture of the thigh where conservative surgery was necessarily or intentionally practised; of these, 9 remain unfit to be moved, except in case of necessity; 9 have died; and the remaining 10 have been sent north, nearly well. There are recorded 18 cases of amputation of the thigh (of course many other cases were sent on at once from the field to Frederick, Martinsburg and Baltimore); of these, 10 have died and 8 recovered.

Now, what is the ultimate result in these cases where nature attempts to restore the fractured limb? In the first place, it will be observed that in nearly all the cases where union takes place, no

pieces of bone have come away, or else a very few spiculæ have been removed; the result is that, in very many cases, a large number of fragments of bone, entirely destitute of vitality, are shut up within a vast amount of callus, and in many cases, sooner or later, the wound opens afresh from the irritation caused by these disorganized fragments; the patient sinks from the exhausting suppuration of necrosis, or a surgical operation, necessary to afford a chance of recovery, turns the balance against him. I have seen attempts to form bony union, and masses of callus thrown out from as many as a dozen different fragments of a broken femur, showing how hard nature was trying to repair the mischief; and I presume that in many of the cases here mentioned, a greater or lesser number of useless un nourished fragments are encased within the uniting callus. The most favorable case for treatment, and the most favorable result that I have ever known in any case coming under my own supervision, was that of a Captain of the 53d Mass. Vols., who was wounded during one of the assaults on Port Hudson. His left femur was fractured transversely, at the junction of the upper and middle thirds, by a round bullet. He went home from New Orleans with a thigh firmly united, and with but three fourths of an inch shortening; there was no deformity. I learned that he was afterwards able to walk, and supposed him to be as well as ever. What was my surprise to hear, a day or two since, that about seventeen months after the wound had been received, and fourteen after I considered him well, his wound opened afresh, an attack of necrosis came on, and he died. The original fracture was not comminuted, the bone was broken nearly transversely, and the case was as favorable a one as could be found, if we were searching for a case on which to predict a favorable result.

In the second place, it will be noticed that death occurs not unfrequently from secondary hæmorrhage. Pyæmia is more commonly the cause of death in cases like those which have just been briefly described, than in cases of amputation, while sloughing and extensive gangrene is more common in the latter.

The difficulty with the statistics of military surgery is, that the observations do not extend over a sufficiently long period of time. Cases are under the treatment of surgeons in military hospitals for a period varying from a few weeks to a few months, and are then lost sight of; the men often promise to write, but rarely do so. If these cases were retained in service, and ordered to report once a month to the surgeon who last had them in charge, the information collected would be of incalculable value in the practice of military surgery. Suppose that in every case in which union had occurred after gun-shot fracture of the thigh, a furlough for a year had been granted and the men ordered to report by letter once a month to the Surgeon-General's office, an amount of information for our future guidance, of vast magnitude and value, would have been collected, well worth the monthly wages of the men. It seems improper to

compare the results of amputation and conservative surgery in the few cases above mentioned, with any view to the laying down of rules; I merely consider the cases particularly interesting.

*Penetrating and Perforating Wounds of the Chest.*

CASE I.—Serg't Samuel Ensminger, Co. H, 11th Indiana, æt. 21 years. Wounded Oct. 19th. A Minié ball entered the right posterior lumbar region, near the fourth lumbar vertebra, and was removed from beneath the skin just over the junction of the eighth rib with its cartilage. The patient was wounded in the morning, and walked about a mile; he was brought to Winchester the same night. After being wounded he suffered intense pain in the right chest; countenance anxious; breathing short and catching. He had some cough, and expectorated some bright blood; has had very little cough since, and the difficulty in respiration has nearly subsided. Suppuration is now free, and the discharge is not offensive. The resonance is diminished throughout the right chest, and the respiration also; respiration puerile in left chest. Appetite and general appearance excellent. Sent north, supposed to have recovered.

CASE II.—Private George P. Randall, Co. E, 30th Mass., æt. 25 years. Wounded Oct. 19th. A Minié ball entered left chest, between third and fourth ribs, about an inch externally to nipple, and emerged through the middle of the costa of the left scapula, two inches below the spine of the scapula. He spit blood soon after being wounded. His cough has continued to this time (Nov. 8th), but is steadily decreasing in severity. The bloody sputa ceased two days after injury; now, the expectoration is slight and frothy. At first he was obliged to sit upright to breathe, and respiration was very difficult for six days; now, respiration is comfortably performed. Both openings now discharge laudable pus. The resonance is good in both chests; the respiration is diminished in left chest. Appetite and general appearance fine. Walks about ward. Died Dec. 8th, 1864.

CASE III.—Corporal Myron P. Warren, Co. B, 8th Vt., æt. 21 years. Wounded Oct. 19th. A Minié ball entered right chest, between second and third ribs, about two inches from sternum, and passed out through the scapula two inches below the spine of the scapula. At the time of the injury he spit blood at once; he had cough, which still continues and is now very urgent. His expectoration at present is very copious, frothy and purulent; he has paroxysms of partial suffocation. To-day (Nov. 3d) his pulse is 112; respiration 28, breathing quick, labored and catching. His appetite is feeble. The treatment has been anodynes, stimulants and expectorants. The resonance is very much diminished in right chest; the respiration is good above the line of the wound, and nearly wanting below. He died on the 9th of November.

Autopsy, 12 hours after death. Rigor mortis well marked. Right



chest filled with bloody serum, partially coagulated. There are in lower portion of right pleural cavity a number of somewhat purulent, quite offensive, disorganized clots of blood; also some spiculae of bone. The pleural surface of right lung is adherent to the costal pleura along the inner surface of the third rib, except for a space an inch and a half long just outside of the tubercle of the rib; these adhesions are recent and moderately firm. The second and third ribs, particularly the second, are much fractured and comminuted opposite the anterior wound. The right lung is compressed against the vertebral column, and reduced to about one third its original size; it is firmly covered and bound down by recent formations of lymph. The right bronchi are all filled with a purulent, frothy secretion. The track of the bullet through the lung is a tube a little larger than the circumference of an ordinary-sized thumb, and is lined throughout with a firm membrane of lymph nearly one third of a line in thickness. This tube is filled with laudable pus, and opens freely into the right primary bronchus, towards the orifice of the posterior wound. The track through the lung is nearly healed; the lung is somewhat carnified, and crepitates but very slightly. The pleural surface of the lower lobe of the left lung adheres pretty firmly to the costal pleura at its inferior posterior part. The bronchial tubes are much congested, and are filled with a frothy, sero-purulent matter. The lung contains very much venous blood. The scapula is fractured.

CASE IV.—Private James T. Fairbanks, Co. B, 26th Mass., *et. 34*. Wounded Oct. 19th. A Minié ball entered just below the outer third of the spine of the right scapula, and emerged just above the second rib, anteriorly towards the side of the chest. His cough was urgent at first; he had no bloody sputa, but great difficulty in respiration. Now the resonance and respiration are both diminished in right chest, the resonance tubular near base; the respiration is rather augmented in left chest, and there is some crepitus near base. Appetite, &c., fine; sits up and walks about a little. Sent north, supposed to have recovered.

CASE V.—Capt. Rob't F. Wilkinson, 128th N. Y., Judge Advocate 19th Army Corps. Wounded Oct. 19th. A Minié ball entered at a point a little to the right of the ensiform cartilage, and emerged through the eighth rib near its angle, fracturing it; had some bloody expectoration at first, but no cough till three days ago (Nov. 3d). He walked three fourths of a mile after being wounded. At present his pulse is 90. Respiration 20; appetite fine; some coarse crepitation in right back and fine in left; expectoration free and bronchitic. He has also a flesh wound of the abdomen, and a fracture of the right humerus. I learn that soon after I saw him his expectoration became rather suddenly purulent, his cough having increased; he is now at his home in New York, and is fast recovering.

CASE VI.—Corp. Charles Bosbourg, Co. A, 75th N. Y. Wound.

ed Oct. 19th. A Minié ball entered at the junction of the cartilage of the 4th rib, right side, with the sternum, and emerged through the costa of the scapula near its outer edge, about four and a half inches below the spine of the scapula. He spit more or less blood for five days; cough severe and urgent, breathing short and catching. He has been able to lie down always; now cough is diminishing and the expectoration is purulent and frothy. Both wounds are discharging laudable pus. Throughout the upper half of the right chest the resonance and respiration are diminished, good elsewhere on both sides. Appetite and general appearance very fair. Sent north, supposed to have recovered.

CASE VII.—Wesley K. Stubbs, Co. A, 9th N. Y. Artillery. Wounded Oct. 19th. A Minié ball entered the thorax between the fourth and fifth ribs, two inches to the right of the sternum, and passed out between the right scapula and the spinal column. He had cough, and spit blood. Bloody sputa ceased after three days; was obliged to sit upright to breathe. His respiration was at first short and catching, and his countenance anxious. At present the expectoration is slight and frothy. Percussion:—resonance good, except in lower right back. Respiration good, except that there are mucous râles in both backs. Sits up; appetite and general appearance good. Sent north, supposed to be well.

CASE VIII.—Geo. Franks, Co. H, 156th N. Y., *et.* 49 years. Wounded Sept. 19th. A Minié ball entered left thorax, an inch and a half outside of the nipple, fracturing the third rib, and emerged just below the lower angle of the left scapula. Had bloody sputa at first, and cough. These symptoms lasted about four weeks. His countenance has been anxious, and his respiration hurried, sometimes as high as 40 per minute. There is extensive emphysema throughout left back. Hardly any respiration can be heard on left side, and the respiratory murmur seems to be diminished in right. The posterior wound discharges pus very freely. His cough is for the most part slight; when present it is painful, and the expectoration bloody. Appetite and general appearance fair. Remains Jan. 3d, 1865. Unable to be moved.

CASE IX.—Serg't Gilbert H. Denny, Co. G, 18th Indiana, *et.* 22 years. Wounded Oct. 19th. A Minié ball entered the thorax on a line with the nipples, between the sternum and right nipple, and emerged just below the right axilla, between the fifth and sixth ribs. His sputa were bloody immediately after injury, and he had cough; his breathing was hurried and anxious. On the 20th reached Winchester; his respirations were then 22 a minute. On the 1st of November his pulse was 128, and respirations 42. Now he restrains the cough as much as possible. The wounds are discharging freely. To-day (Nov. 7th) his respirations are 20 and pulse 80. Resonance and respiratory murmur diminished in right chest. Remains in Winchester, Jan. 3d. Unable to be moved.

**CASE X.**—Henry B. Stanton, Co. D, 30th Mass. Vols., *æt.* 30 years. Wounded Oct. 19th. A Minié ball entered at the junction of the cartilage of the sixth rib with the sternum on the right side, and emerged just below the lower angle of the left scapula. He coughed at once, and spit considerable blood. Bloody sputa continued three days; was obliged to sit upright in order to breathe, his breathing short, catching and gasping. He was in the hands of the rebels all day; was told he would die, and was robbed of his watch, money and part of his clothes; his shoes were too small for a rebel officer who tried them on, and these he saved. He has had not much cough since the first few days after he was wounded, till lately. On right side the resonance on percussion is wanting, below a line connecting wounds. The respiration is diminished in right chest, and the gurgling of fluid, apparently in the track of the wound, can be distinctly heard. Both wounds are discharging slightly. Appetite and general appearance excellent. Jan. 3d, has gone home well.

**CASE XI.**—John Doran, Co. G, 131st N. Y., *æt.* 56 years. Wounded Sept. 19th. A Minié ball entered between eighth and ninth ribs, on a perpendicular line dropped from left axilla, and was cut out just over the point where the eleventh rib, left side, joins the spine. He coughed at once, but did not spit blood for two days; his breathing was at first short and catching. Now, the anterior wound is healed, and the posterior is discharging. He is nearly well. Sent north, supposed to have recovered.

**CASE XII.**—Albert Smith, Serg't Co. B, 29th Me. Wounded Oct. 19th. A Minié ball entered through the cartilage of the fourth rib, on the right side, near its junction with the sternum, and passed out just below the lower angle of the scapula. Had no bloody sputa, and very little cough; his breathing was short, but not very catching; he sat upright in order to breathe with more ease. Never has had any expectoration. Resonance and respiration both diminished on right side; both absent below a line connecting the two wounds. On the left side the respiration appears to be rather increased. Appetite and strength good. Sent home, supposed to have recovered.

**CASE XIII.**—John Coleman, Co. I, 160th N. Y., *æt.* 17 years. Wounded Sept. 19th. A Minié ball entered right thorax at junction of third rib with its cartilage, and passed out through the right scapula, about an inch and a half from its internal border. His sputa were bloody for five days, and rusty for a fortnight afterwards. Was obliged to sit upright to breathe; his respiration was short and gasping; very free hæmorrhage and expectoration of blood. Has had paroxysms, threatening suffocation. Resonance and respiration slightly diminished somewhat below a line level with wounds, but good in character everywhere; somewhat puerile in left chest. Is gaining flesh and strength rapidly; goes all about the town.

Right chest is somewhat shrunk, and the motion of the right arm somewhat impaired from want of use. Sent north, well.

CASE XIV.—Lorenzo Parker, Co. K, 29th Me., *æt.* 19 years. Wounded Oct. 19th. A Minié ball entered upper surface of right shoulder, just in front of the centre of the upper edge of the scapula, passing through the chest, and came to the surface just over the space between the angles of the fifth and sixth ribs, where it remained and can now be felt. He coughed considerably, and spit much bright blood; his breathing was short and catching; he has never been obliged to sit up to breathe. The wound is nearly healed. His appetite and general condition have been excellent, and he has experienced but slight trouble. He cannot take a very long breath; he is up and about the ward all day. The resonance is somewhat diminished in right side and back; elsewhere good in both chests. The respiration is diminished throughout the right chest, and nearly absent below axilla; rather puerile in left chest. He still (Nov. 7th) has some expectoration of frothy, somewhat purulent mucus. Sent north, well.

CASE XV.—Addison Oliver, 1st Me. Battery, *æt.* 23 years. A large, stout, strong man, 6 feet high. Wounded Oct. 19th. A Minié ball entered left shoulder, an inch and a half below acromioclavicular articulation, and passing through the shoulder-joint and thorax, was removed by an incision just below the inferior angle of the *right* scapula—making a wound seventeen inches long, from entrance to exit. He spit no blood when wounded, and had no hæmorrhagic sputa till Nov. 1. His condition was encouraging when brought to Winchester, three days after the injury. On the 1st of November pneumonia attacked him. He began to prefer the half recumbent position; had much pain when coughing; chills and delirium soon followed; the pneumonia became complicated with gangrene of the lungs, and he died on the fifth of November. The ball was found to have fractured the shoulder-joint, to have traversed the left chest and lung, to have fractured the fourth rib between its angle and the articulation with the vertebra, and to have broken the spinous process of the vertebra. The left lung was gangrenous, the right partially hepatized; exudations of lymph covered the pleuræ of both chests.

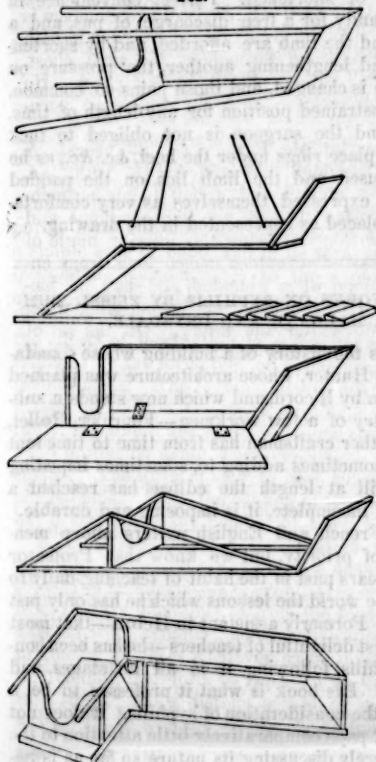
CASE XVI.—Private Wm. H. Roberts, Co. F, 153d N. Y., *æt.* 19 years. Wounded Sept. 19th. A Minié ball entered the upper surface of the left shoulder, midway between the superior border of the scapula and the middle of the clavicle, and remained in thorax. He coughed much, and spit blood freely for three days. For two weeks he was obliged to sit upright to breathe. For some time he seemed to improve, but gradually sank and died, on the 22d of October, thirty-four days after he was wounded. No autopsy.

CASE XVII.—Albert Page, Co. B, 29th Me., *æt.* 50. Wounded Oct. 19th. A Minié ball entered the left side of the right chest

four inches below the nipple, and passed out from the back over the 12th rib. Patient coughed much after being wounded, but does not recollect that he spit blood; has had continuous cough since. Now (Nov. 7th) his countenance is flushed; pulse accelerated; respirations 30 per minute; expectoration adhesive, viscid and bloody; is too feeble to bear a prolonged examination. He subsequently died.

CASE XVIII.—Ransom Colbert, Co. K, 8th Vt., æt. 20 years. Wounded Oct. 19th. A solid-shot struck him on the side of the left chest, fracturing the sixth, seventh, eighth and ninth ribs, and exposing the pleural cavity to within half an inch of the apex of the heart. Pieces of necrosed bone have come away from time to

FIG.



time; the discharge has been very free. Now there is a space  $4\frac{1}{2}$  by  $3\frac{1}{2}$  inches, nearly filled by bright red granulations. His pulse is today (Nov. 7th) 135; his appetite is fair, and he is getting stronger every day. He was afterwards sent north, able to travel.

Twenty-two cases of penetrating or perforating wounds of the chest have come under my observation during the last autumn. Of these, 15 have recovered, 5 have died, and 2 remain (Jan. 3d, 1865) in Winchester in a more or less critical condition. The treatment of these cases has been simple, and the "sealing process," as it has been termed, has never been practised. In some of the cases it would have been better, perhaps, if all of the broken and detached pieces of bone had been removed, no matter how freely the chest must have been opened. The per-

centage of recoveries following wounds of the thorax and lung is

very surprising, when the severity of the injury and the important organs lacerated are considered.

The drawings (see preceding page) executed by the Hospital Steward of the 176th New York Volunteers, represent various apparatus used in the treatment of fractures of the limbs, and are completed by strips of bandages fastened to either side of the apparatus, as represented in Fig. 2 (see last week's issue, p. 11). The apparatus here represented is ingenious, and the method of application very convenient. In the splints numbered 1 and 3 the limb can be placed on a double inclined plane, on a single inclined plane, or it can lie horizontally, according as certain of the supporting strips of bandage are lengthened or shortened. Perfect convenience in dressing the wound, opportunity for a free discharge of pus, and a free circulation of air around the limb are afforded, and by shortening one strip of bandage and lengthening another, the pressure on particular parts of the limb is changed, and those pains so common, when a limb is laid in a constrained position for any length of time, are immediately relieved, and the surgeon is not obliged to tuck compresses here and there, place rings under the heel, &c. &c., as he is when fracture boxes are used and the limb lies on the padded floor of the box. Patients expressed themselves as very comfortable when their limbs were placed as represented in the drawing.

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A REVIEW OF RECENT WORKS ON SYPHILIS BY ZEISSL, BUMSTREAD, AITKEN, HALDANE AND DRYSDALE.

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THE history of syphilis is as the history of a building whose foundation-stone was laid by John Hunter, whose architecture was planned and whose walls were begun by Ricord, and which now stands a substantial mark of the industry of a few workmen—Fournier, Rollet, Lee, and Zeissl. Many another craftsman has from time to time lent a hand in its construction, sometimes adding to, sometimes impeding the progress of the work, till at length the edifice has reached a height at which, though still incomplete, it is imposing and durable.

The publications of the French and English writers above mentioned have the advantage of priority, but we know that Professor Zeissl has been for several years past in the habit of teaching daily to students from all parts of the world the lessons which he has only just now thought fit to publish. Formerly assistant to Hebra—that most shrewd of observers, and most delightful of teachers—he has been constantly in the midst of syphilis, following it in all its stages, and watching it in all its forms. His book is what it professes to be, a work especially devoted to the consideration of syphilis. It does not treat at all of gonorrhœa; it pays comparatively little attention to the local non-syphilitic ulcer, merely discussing its nature so far as is necessary to show how totally distinct it is from syphilis; but it deals most completely with syphilis proper.



Doctor Bumstead's book is a perfect compilation of all that is worth knowing on venereal disease in general. It is divided, in this edition, into three parts, which treat of gonorrhœa, chancreïd (local non-syphilitic ulcer), and chancre (primary manifestation of constitutional syphilis). It fills up a gap which has long been felt in English medical literature, by furnishing the English reader with a complete treatise on venereal diseases. The doctrines contained in it agree essentially with those of Zeissl.

With regard to nomenclature, it will be well to state at the commencement that the term *chancre* will be used to represent the true primary syphilitic affection; and the term *simple sore* for the purely local non-syphilitic ulcer. Zeissl employs the term *chancre* for the simple sore, and syphilis for the primary specific affection; but this is confusing to English readers, in whose minds *chancre* and *syphilis* are indissolubly connected. Again, Bumstead employs the word "*chancreïd*" for the simple sore; but this word was the origin of a faulty conception of the real nature of the sore, and was coined by Clerc, who supposes that the sore is the product of the inoculation of a chancre on one who is already syphilitic; that it is, in other words, a modified syphilis, just as varioloid is a modified variola—a great error.

There are now recognized three distinct venereal affections, dependent on three distinct poisons: 1. *Gonorrhœa*. 2. *Simple sore*—a purely local affection, not infecting the system; derived always from a simple sore or bubo, and in its turn producing a simple sore when inoculated; communicable to the syphilitic and the non-syphilitic alike; capable of being repeated on the same person indefinitely, and therefore often multiple; having no period of incubation, but showing the effects of inoculation in a few hours, redness, and itching, soon followed by the formation of a pustule, which bursts and leaves a painful ulcer. The inguinal glands are often entirely unaffected; but if they be affected, one gland only, as a rule, swells, enlarges considerably, is painful, and tends to suppurate; the pus from this so-called bubo producing again, when inoculated, a simple ulcer like the predecessor. The ulcer is slow to heal, sometimes spreads and becomes phagedænic. With the healing of the sore, the disease is at an end; but it may recur any number of times in the same individual.

3. *Chancre* is the first manifestation of a constitutional disease—syphilis; is derived always from a chancre, or from the secretion of some later manifestation of syphilis (so-called secondary, probably, too, from tertiary affection), or from the blood and secretions\* of a person affected with syphilis; is communicable only to the non-syphilitic, producing no effect whatever when inoculated on one that is syphilitic; cannot, therefore, be repeated on the same person, and is, as a rule, single; has a distinct period of incubation, from three to four weeks† on an average, during which time all signs at the point of ino-

\* Semen and perhaps milk. Zeissl. † Zeissl.

culcation disappear, till, at the end of the above period, there appears a papule, which gradually spreads in circumference, becoming at the same time indurated. This papule, in a few days—in some places sooner than in others—begins to exfoliate superficially, and secretes a scanty gummy substance, which, if the part be not exposed to friction, dries, and forms a crust that falls or is rubbed off, and leaves behind a disk-shaped, somewhat elevated prominence, cartilaginous to the touch, dull red in color, and glistening as if varnished (*firnis-artig*). The centre of this, after a time, softens and breaks down, so as to become slightly excavated or scooped out, and to give the appearance of an ulcer. This, however, may not be noticed, if the original lesion by which the disease was communicated was superficial—a mere abrasion, as is so often the case in connection. The indurated mass varies in size from that of a pea to that of a bean; but it may involve the whole glans penis, or the whole of the circumference of the os uteri, or the whole of one labium. The inguinal glands, on one or both sides, become gradually enlarged and indurated, *that gland being first affected which is nearest the chancre*, and the others following in order, till Ricord's "*Pléiade ganglionnaire*" is formed, not painful, and not prone to suppurate. The chancre may occur, like the simple sore, in all parts of the surface of the body. It disappears slowly, the induration remaining sometimes for months, or, as some have observed, for years. It is followed, in from six to ten weeks from the time of the first appearance of the papule, by secondary symptoms. An individual once syphilitic is, as a rule, proof against a recurrence of syphilis; but, as in the case of the exanthemata, this is not invariable.

It may be asked, What means have modern observers employed, that they are able to lay down laws so entirely subversive of old doctrines? We answer, *inoculation*, and that not limited (which was the cause of Ricord's many errors), but practised largely and widely. This is the compass which has guided them amidst all the shoals and rocks of this most difficult question. No amount of clinical inquiry could thus have unravelled certain knots that entangled the subject. Herein, too, lies the reason why the French and Germans have gone ahead of us in this matter. Whether it be the English surgeon or the English patient who believes more implicitly in the maxim, *Fiat experimentum in corpore vili*, we know not; but certain it is that experimental inoculation of syphilitic virus on those who have never had syphilis would neither be suggested by surgeon nor tolerated by patient in any English hospital. It has been done, nevertheless, abroad, and that repeatedly, from a belief, no doubt, that great means must be employed to arrive at great ends.

Foremost among such experimentalists stand Waller of Prague, Danielssen of Bergen, Rollet of Lyons, and lastly, Hebra of Vienna.\*

\* We speak here only of true syphilitic inoculation on those who have never had syphilis, omitting mention of the thousands of non-syphilitic inoculations, which will be spoken of under Syphilization.

The next important question, which for a long time past has been insisted on by Zeissl, is the occurrence of *twofold inoculation* (*doppelte infection*). He points out that the terms "chancre mixte" and "chancre mulet," employed by the French, are improper, as implying that there is a positive intermixture or blending of the two poisons to produce one effect. This, however, is not the case. It is quite possible that both poisons may be communicated at the same time in one intercourse; that the simple ulcer may appear and go through its regular course; that afterwards, at the expiration of about three weeks, an induration may gradually show itself at the base of the ulcer (the syphilitic virus, which has been incubating, beginning now to manifest itself); and that there may result simple sore + chancre. But here there has been no admixture of the two poisons: each has produced its proper effects in its peculiar way; only, from the fact that the same spot has served for the introduction of both, an apparent complication has been produced.

On the other hand, a person who has a chancre may have intercourse with another person who has a simple sore. In this case, there will appear in a few hours signs of the sore developing itself on the top of the chancre; the result here being chancre + simple sore. Nay, further, one of the indolent indurated glands in the groin, caused by the syphilis, may become inflamed by the additional virus of the simple sore, and there shall be a bubo in a syphilitic gland. If, now, the pus from this bubo, or from the sore, be taken and inoculated on another part of the same person, it will give rise to a simple sore; or, on another non-syphilitic person, it will produce the same effect, *provided that none of the blood containing the syphilitic virus be mixed with the pus*. This is most important in the history of syphilis, first, as showing how distinct the two poisons are; secondly, as a warning that the surgeon must be very careful in his prognosis. If a patient consult him with a sore of seemingly the most innocent character, he must not pronounce positively that no secondary symptoms will follow, but must wait a few weeks for the possible appearance of the syphilitic induration, which may be already dormant in the system. Cases of the above kind are related by Fournier\* and Rollet,† the latter of whom has inoculated a healing chancre with virus from a simple sore, and has clearly produced a simple sore on a chancre.

Zeissl has cut chancres out of the dead subject, and examined sections microscopically. He finds the induration to be caused by proliferous development of cells in different stages, many of which cells are already in a state of fatty degeneration. In a section perpendicular to the surface the papillæ are seen closely crowded together by abundant connective-tissue corpuscles. In a horizontal section there are seen numerous decussating fibrils of connective tissue, in the areolæ of which are imbedded connective-tissue cor-

\* *Leçons sur le Chancre*. 1860.

† *Recherches sur la Syphilis*. 1861.

puscles, some young, some degenerate. Bärensprung states that the granular substance at the base of a chancre gives the amyloid reaction with iodine, and consequently regards the induration as a manifestation of constitutional syphilis, in that its behavior, under the influence of this reagent, corresponds with that of the gummy tumor and other later manifestations of syphilis.

Although, up to a certain point, a believer in the cellular pathology, Zeissl questions Virchow's theory concerning the nature of the syphilitic diathesis,\* that the virus stored up or encapsuled, as it were, in certain centres, is set free at intervals to poison the blood, and cause the well-known outbreaks of syphilis; and that, consequently, during the intervals of rest, the system generally is not syphilitic, but that the disease is strictly confined to those centres in which the poison is contained. To this Zeissl replies: How is it, then, that a syphilitic man will, during such an interval of rest, infect his wife, and have a syphilitic child? He thinks that the blood as well as the lymphatic system, having once undergone a specific change, remains so changed for life. He does not deny that swelling of the lymphatic glands is a proof that syphilis is still latent, but he does deny that the poison is localized in these glands. He also remarks that pigment-staining about the spot where a chancre has been, or about the seat of former syphilitic eruptions, is to be regarded with suspicion as a sign that the poison is still lurking in the system. The pages which treat of syphilitic eruptions are, as would be expected from Vienna, very elaborate.

*Das spitze Condylom, condyloma acuminatum*, our *condyloma*, is generally believed to be never syphilitic. This is an error. It may germinate just as well on syphilitic as on unsyphilitic soil, whenever and wherever a proliferous cell-development takes place from the rete Malpighii. It not unfrequently happens that a warty outgrowth springs from a mucous tubercle, and presents to the naked eye, or to one examining carelessly, exactly the appearance of the non-syphilitic wart (such as is caused by the irritation of gonorrhœa, &c.). The real nature of such a growth depends on the nature of its basis.

The syphilitic affection of internal organs, *Gummosé geschwulst*, or *gummy tumor*, requires special notice. Virchow's description of these tumors is known to many.† They resemble, he says, most nearly young granulation tissue, and are formed by enlargement with hyperplasia of connective-tissue corpuscles, and softening of the intervening substance. After a time, the mass thus formed undergoes fatty degeneration in its centre, and breaks down into a tenacious synovial-like substance (whence the name). Wagner‡ regards them as distinct new formations, and gives the tumor the name of "syphiloma." Professor Aitken's pamphlet contains an account of several post-

\* Cf. Virchow's Cell. Path. Transl. by Chance, p. 132.

† Über die Natur der Constitutionellen Syphilitischen Affectionen. Archiv. 1858. Band xv. s. 320.

‡ Das Syphilom, oder die Constitutionelle Syph. Neubildung. Leipzig. 1863.

mortem examinations on soldiers who died with chronic syphilis, and in whom were found tumors of this kind occupying various organs of the body, but more particularly the lungs. Dr. Haldane relates a case of a prostitute who died suddenly: a number of deposits were found in the septum of the heart, which from their nature he supposes to be syphilitic gummata. Attention has also been recently called to the occurrence of such growths in various organs by Wilks,\* Gambaco,† and others. Wagner's account of them is masterly, and his work will repay perusal.

A very interesting description of severe endemic syphilis follows. So terrible has been, at different times, the spread, and so severe the form of this disease, that various names indicative of its malignancy have been given by the stricken inhabitants ignorant of its nature. Thus the Radesyge, in Norway, 1720; and in Sweden, 1762; the Skerljevo, in Croatia, 1790; the Sibben, or Sibbens, in Scotland, at the time of Cromwell's invasion, were all instances of this. We have heard an excellent account of this matter from the lips of Professor Hebra, who visited Norway to inquire into the Spedalskhed, and was sent, in the year 1851, by the Austrian Government, to investigate the nature of the Skerljevo, which prevailed at that time. He spoke of this latter, and of the Radesyge, as being principally syphilis in various forms, hereditary and acquired, though both included some other diseases of the skin, lupus, &c.

Woe be to the wretch who falls into the hands of a believer in *syphilization*! We had occasion to see, several times, both in Paris and Vienna, patients who had been thus treated, and whose arms, back, chest, and legs were pitted with innumerable cicatrices. Nor shall we easily forget one "misérable," who lay with an enormous phagedænic sore, involving the whole of one buttock and the upper part of the thigh—a consequence of inoculation. This syphilization, or indefinite multiplication of simple sores by inoculation, and therefore really no syphilization at all, has been tried at Vienna, as elsewhere on the Continent, and with the anticipated result—complete failure to cure syphilis, or to prevent its recurrence.

For the simple sore, the *treatment* required is purely local: early cauterization with the Vienna paste, or Canquoin's paste ("composed of equal parts chloride of zinc and flour, dried by heat, to which alcohol is added gradually till a paste is formed; this is spread on a thin layer of cloth, and again gently heated. A disk corresponding in shape to the ulcer is cut, and retained on the surface previously cleansed, from one to three hours, or in large and phagedænic ulcers, from five to six") and cleanliness. Mercury is useless. For syphilis proper, mercury given in moderate doses is a valuable remedy. It is not to be administered with the idea of *curing* the disease, as quinine cures ague, but it promotes materially the *healing* of the chancre and

\* Guy's Hospital Reports, 1863. Vol. ix., p. 1.

† Cf. Med.-Chir. Review, Vol. xxxi., p. 39.

the removal of the induration: it acts more like a specific in removing most secondary symptoms; and there are certain forms of tertiary syphilis which sometimes yield rapidly to mercury after resisting iodine and all other remedies.\* Most of those who have seen much of syphilis must have met with such pallid, cachectic miserable cases (the effect of syphilis, too, not of mercury) who are restored to new life, and increase rapidly in weight, under the influence of mercury. The above is the unprejudiced decision pronounced by Hebra and Zeissl, after giving a fair trial to all the different plans of treatment recommended by different writers. They made a series of experiments with *extractum graminis* (most expectant treatment); they next gave iodine a fair trial; they treated all syphilitic patients with subcutaneous injections of cold water; they tried syphilization; finally, they have come back to mercury. The form usually prescribed is the bichloride (*hydrargyri corrosiv. sublimat. Ph. Br.*) of which 1-8th gr. is given daily, and, if necessary, increased to 1-5th; though this is seldom the case. Inunction is also practised by them; and a card may be seen hung up in their wards containing directions for inunction, and specifying the part of the body to be anointed on each day of the week. Both Zeissl and Bumstead speak highly of the efficacy of Lee's calomel vapor bath.

Space forbids us to take up the cudgels with the antimercurialists. We hope that Dr. Drysdale's well-written pamphlet will have the effect of checking the indiscriminate use of *hydrargyrum* in all diseases, and of cooling the passion for that panacea, grey-powder, which has so long prevailed among practitioners in this country. But, speaking with a prophetic spirit, we doubt whether he or we shall live to see the day when mercury will be abandoned in the treatment of true syphilis.—*Brit. and Foreign Medico-Chirurg. Rev.*

## THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, FEBRUARY 9, 1865.

**MORTALITY IN OUR STATE ALMSHOUSES. ONE OF ITS CAUSES.**—Considerable comment has been excited from time to time by the great mortality reported at our State Almshouses. Committees of visitation have made thorough examinations of these institutions, and have found satisfactory reasons for this state of things without being able, under existing regulations, to remove it. As a part of our system of public charities, there have been many things about these enormous pauper receptacles not at all flattering to our State pride or satisfactory to our benevolent instincts. We propose to call attention at the present time to one class of causes which swells the list of mortality at these institutions, and which demands immediate legislative action to put a

\* See some very sensible observations by Wilks, loc. cit., p. 13.



stop to a practice as inhuman as it is disgraceful. We refer to the loose and irresponsible manner in which persons considered suitable for admission into them are often conveyed thither from long distances without any proper regard to their physical condition at the moment, to die almost immediately on arrival, or perhaps on the way.

We confess we were shocked beyond expression a few days since, when we heard from reliable authority the simple statement of the cruelties which have thus been perpetrated under the color of administering a great public charity. They can only be classed among the enormities revealed last year as practised upon some of the insane paupers in our country poor-houses. Poor sufferers, almost on their dying beds, have been hurried away, miles from the place of their abode, to draw their last breath in a few hours after reaching their destination, the event perhaps caused by the fatigue and exposure to which they have been so inhumanly subjected. We can hardly speak of such things with anything like patience. A few facts in our possession will be more eloquent than any poor words of ours.

We have evidence that within a year a man fatally burned was taken from Taunton to one of our State Almshouses in a comatose condition, from which he did not rally; a distance of some fifty miles. The same day a man was transferred from the same place to the same institution while very sick with ship fever.

A man was sent from New Bedford in a dying condition, and breathed his last within five minutes after he was laid on a bed. Another arrived in a dying condition and died the same night. In numerous other cases the patients have died within three or four days after their arrival.

A woman arrived from Boston in the last stages of labor, and her child was born, notwithstanding the utmost haste was employed in conveying her from the railroad to the almshouse, before her clothing could be removed. Two others arrived in labor, their pains having commenced before leaving Boston, and it is understood that the fact of their condition was known to the officers who hurried them off by the cars. In two instances within three months women have been sent, one from Boston, with her infant, the other from Roxbury by way of Boston, without any attendants, *only five days after confinement*. A poor girl was on her way, with an attendant, from a notorious physician's place in Boston, and died at the Titticut station.

The following is an extract from a letter which we have received:—"I was passing through the smoking-car (where the paupers are usually put), before the train left the Boston Depot, when my attention was called to a man who was resting his head on the back of the seat before him. He was dead. I detained the train, called an officer and had the body taken out. The next morning the papers reported a death in the cars from *heart disease*. I think from his looks it was a *broken heart*. This man was from Roxbury."

Patients affected with contagious diseases have been thrust into these institutions without warning or preparation on the part of the officers, exposing the inmates to great risks. We have already mentioned that ship fever has been thus introduced, and in two instances the smallpox was introduced into one of them, causing thirty cases of variolous disease in the institution. But we forbear. We think we have said enough to show great need of reform.

It would appear that by existing arrangements the duty of deciding what persons are in a suitable condition for removal to a State Almshouse is left in very incompetent or unworthy hands. It is very plain that in cases of sickness this question can only be decided by a reliable physician. It is cruelty worthy only of savages to hurry off to such a place a dying fellow-creature in the way in which it has too often been done, and it is injustice to the officers of these institutions to have the bills of mortality in them swelled by such additions. Last year, we understand, an effort was made to induce the Legislature to take some action in the premises, but the effort failed on account of an unfavorable report from the committee to which it was referred. This year the attempt has been renewed, and we hope it will meet with a better fate. It is a case which touches the honor of our State most closely. If it is intended to make charnel houses or pest houses of what were intended as places of refuge for the unfortunate, the fact ought to be known. It may not be amiss to state that this subject was brought before the Councillors of the Massachusetts Medical Society at their last meeting, and elicited very strong expressions of feeling from gentlemen present; it was referred to a committee for future action. We hope that our medical brethren throughout the State will at once exert their personal influence to bring about some legislative action which shall wipe out forever, at the present session, a stigma which such proceedings, unchecked, will soon make indelible.

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**THE LATE DR. LUTHER METCALF HARRIS.**—When a worthy gentleman, who has faithfully performed the duties required of him by the profession and the community, passes away, it is proper that a fitting notice be taken of his departure. Such a one was Dr. Harris, of Jamaica Plain. Through a long and useful life he industriously and unostentatiously labored for the good of others, in private services and in public office, with unaffected simplicity—happy in the conscious effort to be useful. Remarkably unassuming, he rather waited than sought opportunity. Ever ready to yield his claims for preferment, he desired no prominent part, content to serve wherever needed—

"Nor envy nor ambition knew."

Studiously inclined, he gave much time to literary pursuits, and especially to music, which he highly appreciated and for which he had a refined taste. His latter years were pleasantly passed in genealogical researches; until a gradually deepening cloud obscured his intellect. Tenderly cared for by wife and children, most kindly esteemed by neighbors and friends, he peacefully deceased on the 28th of January, 1865, aged 75 years and 8 months.

A friend has furnished the following items of his life-history.

Dr. Harris was born in Brookline, Mass., May 7th, 1789. Had his education at the district school, studying Latin and Greek, till he entered an apothecary's shop, at 15 to 16 years of age, and remained there fifteen months, "compounding the best recipes." Was fitted for college by Rev. Dr. Strong, of Randolph. Entered sophomore in 1808 at Brown University, and graduated in 1811. Immediately began the study of medicine with Dr. LeBaron, of Jamaica Plain, "near the pump." Heard Dr. William Ingalls's two courses of lectures on Anatomy. Read medicine three years, "with two years of riding."

Through Dr. LeBaron and Col. Dudley, was appointed surgeon and stationed at Fort Independence (1300 men) in the summer of 1814. For this service he, in late years, received a grant of land from the Government. In the spring of 1815 went to Oxford, N. H., and practised five years. Then, after a few months at Milton, returned to the edge of Brookline and Jamaica Plain. In 1823 he joined the Massachusetts Medical Society. Dr. LeBaron having removed to Roxbury "Street," he remained at Jamaica Plain for many years without any local competitor. As the town increased other practitioners settled near him, with all of whom he lived in perfect amity and good will.

We see it stated, on the authority of a despatch from Washington, that Ex-Surgeon-General Hammond has failed to get a hearing from the Senate Military Committee. They think it unwise now to reverse the action of the military court. Dr. Hammond's case is worthy of the sympathy of all honest men, and we hope he will receive it and be sustained by it, until justice, sure though tardy, is done him. The medical profession owe it to themselves and the country to use their utmost endeavor to have his respectful petition to the Senate listened to and fairly acted upon.

**A USEFUL DISINFECTANT.** *Messrs. Editors,*—Among the many modern agents of this class of medicines, there is none that has proved so useful or been more generally used, than Labarraque's solution of the chloride of soda. But this preparation is not without a few minor obnoxious qualities, and, to remedy these qualities, the following method has been used.

Labarraque's solution is very seldom, if ever, used in the undiluted state, owing to the irritation it produces, water being generally used as a diluent.

That this aqueous solution produces an irritation of the surrounding healthy skin, erythematous in character, and at the same time is quickly evaporated, none will deny.

By diluting the strong solution with glycerine, in any desirable proportion, we have an agreeable disinfectant, and at the same time one which remedies the two evils, if such they may be called, above mentioned. The glycerine retards the evaporation, keeping moist for a number of hours, and at the same time we avoid the dripping from the use of the aqueous solution and the erythema it occasions.

It would seem that this preparation might be especially useful in army hospitals, where the supply of attendants is not the most bountiful. We have used it in a number of cases with entire satisfaction.

Boston, February 1st, 1865.

M. F. GAVIN, M.D.,

House Surgeon, City Hospital.

It is stated in the *Medical and Surgical Reporter* that the amount raised by subscription for the hospitable entertainment of the members of the American Medical Association at New York last year was \$5,249. The number of delegates present was five hundred.

"Notwithstanding the handsome and liberal manner in which the Association was entertained, the amount collected for the purpose was found at the conclusion to be more than double what was necessary, and there remained a surplus, after all the bills were paid, of

\$2,733.67. The disposal of this unexpended balance became a question of interest, which was finally settled as follows :—

"By resolution of the committee it was directed that the amount be returned *pro rata* to the contributors, or donated to the building fund of the New York Academy of Medicine, or to the New York Society for the Relief of the Widows and Orphans of Medical Men, as the respective contributors should designate. Accordingly the whole surplus, being 52.08 per cent. of the amount subscribed, was disposed of as follows: sixty-two contributors subscribing \$1,990, had returned to them *pro rata* \$1,036.43; forty-seven contributors subscribing \$922.50, donated their surplus of \$480.42 to the building fund of the Academy of Medicine, and eighty-five contributors of \$1,601.50, donated their portion of the surplus, \$834.02, to the Widows' and Orphans' Relief Society. Thirty-eight contributors, subscribing \$735, failed to designate, as requested, what disposition should be made of their unexpended balance, amounting to \$382.80, and this sum was consequently divided equally between the two societies above named, whereby the whole amount collected was finally disposed of, and the committee concluded their very satisfactory and interesting labors."

At the last sitting of the Academy of Sciences, Paris, a paper was received from Dr. Blanchet on three curious cases of constitutional lethargic slumber. One of them was that of a lady 24 years of age, who, having slept for forty days at the age of 18, and fifty days at the age of 20 during her honeymoon, at length had a fit of sleep which lasted nearly a whole year, from Easter Sunday, 1862, to March, 1863. During this long period a false front tooth had to be taken out in order to introduce milk and broth into her mouth. This was her only food; she remained motionless, insensible, and all her muscles were in a state of contraction. Her pulse was low, her breathing scarcely perceptible; there were no evacuations, no leanness; her complexion was florid and healthy. The other cases were exactly similar.—*Canada Medical Journal*.

#### VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, FEBRUARY 4th, 1865.

##### DEATHS.

	Males.	Females.	Total.
Deaths during the week	32	46	78
Ave. mortality of corresponding weeks for ten years, 1853—1863,	38.6	39.2	77.8
Average corrected to increased population	00	00	85.12
Death of persons above 90	1	0	1

PAPERS have been received, on the Subcutaneous Injection of Morphia, and on the use of large quantities of Sulphuric Ether without fatal effects; also a letter from a correspondent in Vermont.

DEATHS IN BOSTON for the week ending Saturday noon, Feb. 4th, 78. Males, 32—Females, 46.—Abscess, 1—accident, 2—apoplexy, 2—congestion of the brain, 1—disease of the brain, 2—bronchitis, 2—cancer, 2—cholera morbus, 1—consumption, 15—convulsions, 1—croup, 2—debility, 1—diarrhoea, 1—diphtheria, 2—dropsy, 3—dropsy of the brain, 3—drowned, 1—erysipelas, 1—scarlet fever, 3—intemperance, 1—disease of the liver, 1—inflammation of the lungs, 5—marasmus, 1—old age, 7—paralysis, 1—peritonitis, 1—pleurisy, 1—premature birth, 1—puerperal disease, 1—skin disease, 1—smallpox, 2—suicide, 1—teething, 1—unknown, 6—whooping cough, 1.

Under 5 years of age, 27—between 5 and 20 years, 4—between 20 and 40 years, 18—between 40 and 60 years, 11—above 60 years, 18. Born in the United States, 55—Ireland, 19—other places, 4.